Iceberg Outlook | For the Labrador Coast and East Newfoundland Waters

Issued by the United States Coast Guard (USCG) International Ice Patrol (IIP)
Valid 14 July 2023 00 UTC

The next Iceberg Outlook will be issued 21 July 2023.

THIS PRODUCT IS NOT FOR NAVIGATION. ALL ICEBERG CONDITIONS GIVEN ARE IIP ESTIMATIONS.

Labrador Coast (north of 52°N):

As of 13 July, sea ice has fully deteriorated along the Labrador Coast and south of 60°N[i]. In recent weeks, a rapidly warming atmosphere and ocean, with record anomalously high temperatures, lead to the abrupt northward retreat of the sea ice edge to north of 63°N[ii]. IIP estimates that there are one thousand seven hundred and ninety-eight icebergs between 52°N and 61°N latitude, all of which are in open water[iii]. In general, IIP expects continued transport of icebergs through this region over the coming week, which are now unencumbered by sea ice.

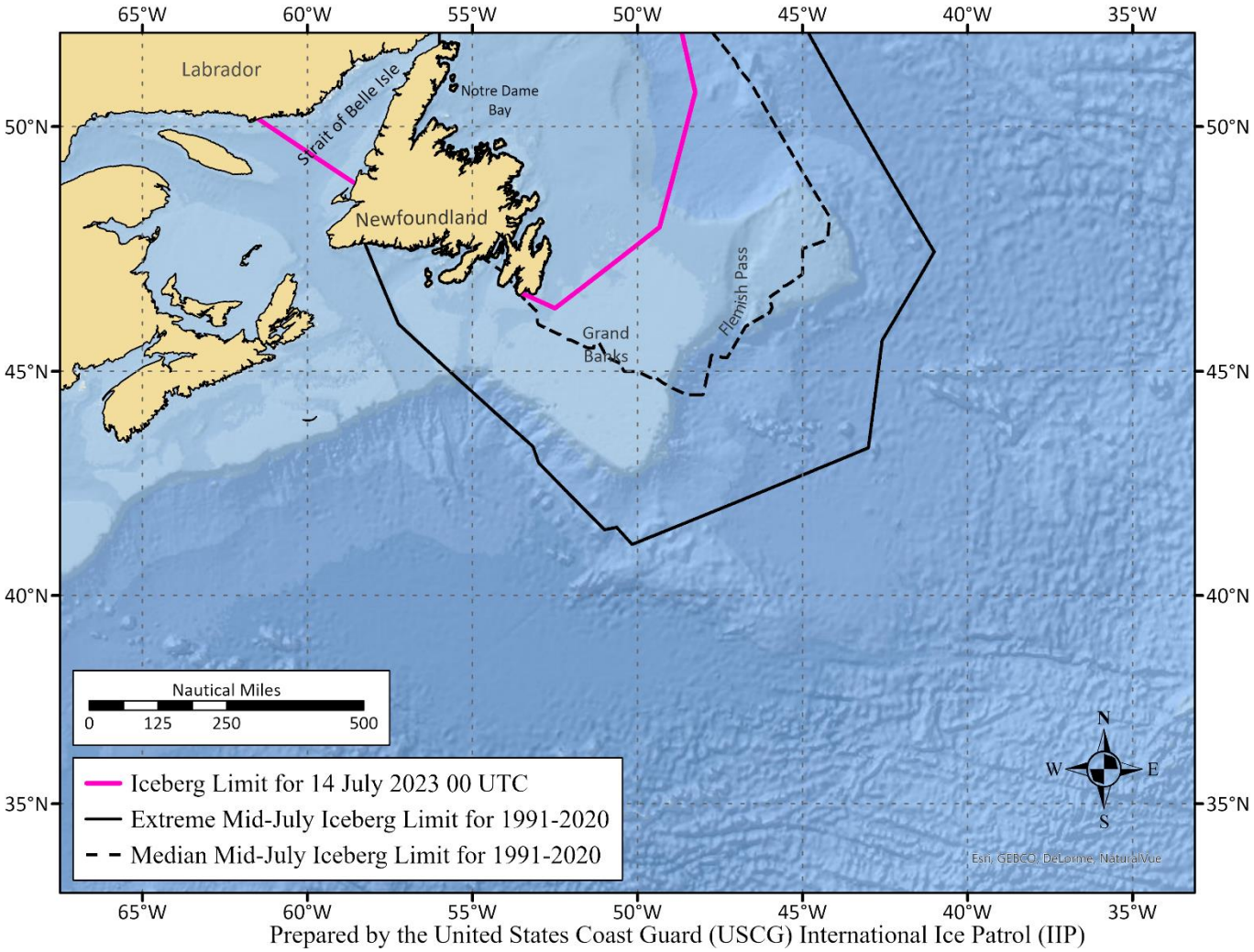
Newfoundland, Strait of Belle Isle, and Gulf of Saint Lawrence (south of 52°N):

Along the southeastern Labrador and northern Newfoundland coasts, in the Strait of Belle Isle and the Gulf of St. Lawrence, sea ice has fully deteriorated. IIP estimates that there are four hundred and thirty-five icebergs south of 52°N latitude, all of which are in open water. IIP has focused on satellite reconnaissance to monitor the iceberg population since May. IIP completed its last aerial reconnaissance flights of the season on 22 June after confirming the iceberg limit at that time. Recent aerial reconnaissance conducted by PAL Aerospace and additional satellite surveillance by C-CORE has confirmed IIP's iceberg limit. Since the last Iceberg Outlook, the southern and eastern iceberg limits have contracted slightly north and west. In open water, icebergs deteriorate faster but also threaten shipping lanes and unsuspecting mariners. At this point in the season, IIP expects the southern iceberg limit to continue to contract.

In the Context of 1991 to 2020 Regional Ice Climatology:

As of 10 July, regional sea ice concentration and coverage is normal for 1991 to 2020, while total accumulated coverage remains below normal. In the 2023 Ice Season, IIP estimates that three hundred and seventy-six icebergs have drifted south of 48°N latitude[iv]. On average between 1983 and 2022[v], IIP estimates that six hundred and eighty-six drift south of this latitude by the end of June, and seven hundred and twenty-eight drift south of it by the end of July. As of 14 July, the iceberg limit remains within the 1991 to 2020 early-July extreme and median (see figure). This may be attributable to both a mean negative North Atlantic Oscillation Index (NAOI)[vi] since February favoring onshore winds and keeping the ice population alongshore, and to record warm global ocean temperatures causing rapid northward heat transport to deteriorate ice quickly.

In summary, the estimated iceberg extent is below normal in the region. The estimated iceberg count south of 48°N is near to below normal. 2023 is the first year since 2019 to be at least more severe than "light".



Prepared by the United States Coast Guard (USCG) International Ice Patrol (IIP)

[i] All sea ice conditions and monthly surface air temperature (SAT) forecasts reported are from Environmental Climate Change Canada's (ECCC) Canadian Ice Service (CIS) East Coast Latest Ice Conditions Ice Products, https://ice-web1.cis.ec.gc.ca/Prod/page2.xhtml?CanID=11091&lang=en.

[ii] All other meteorological conditions and forecasts reported are from the National Oceanic and Atmospheric Administration (NOAA) National Weather Service (NWS) Ocean Prediction Center (OPC) Products, https://ocean.weather.gov/index.php, and the Navy Fleet Numerical Meteorology and Oceanography Center (FNMOC) Products, https://www.metoc.navy.mil/fnmoc/fnmoc.html.

[iii] All iceberg conditions reported are from the latest North American Ice Service (NAIS) Iceberg Products, https://navcen.uscg.gov/north-american-ice-service-products.

[iv] IIP considers 48°N to be the latitude south of which icebergs pose a threat to major transatlantic shipping lanes (Report of the International Ice Patrol in the North Atlantic, IIP, 2018, https://navcen.uscg.gov/international-ice-patrol-annual-reports).

[v] IIP considers 1983 to present to be its modern reconnaissance era in which IIP has used modern tools of iceberg reconnaissance and tracking (Report of the International Ice Patrol in the North Atlantic, IIP, 2018, https://navcen.uscg.gov/international-ice-patrol-annual-reports).

[vi] All North Atlantic Oscillation (NAO) conditions reported are from the NOAA National Weather Service (NWS) Climate Prediction Center (CPC), https://www.cpc.ncep.noaa.gov/products/precip/CWlink/pna/nao.shtml.